

Associated Behaviours to Alcohol Abuse/Alcohol Dependence in Female College Students in Chandigarh, India

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ABSTRACT

Alcohol abuse has been an ubiquitous social problem in all the social strata in every region, globally. The current study is focused on young women students, about their use of alcohol with relation to other human traits including aggression, coping behavior, openness, spiritual inclination, extraversion, stress, thought control etc. The sample group was selected as undergraduate female college students within age group of 18-21 from Chandigarh region, India. The group was provided with questionnaire based on recommended methods. The responses were studied and analyzed using Pearson's Correlation. There was significant positive correlation found among alcohol dependence with aggression; mainly contributed towards physical aggression. Positive correlations were also observed between openness and spiritual practice; and agreeableness and openness. Alcohol dependence was also found to be negatively correlated with openness, spiritual practice and coping. The results showed that degree of some negative traits can be significantly affected by alcohol use.

Keywords: Alcohol Abuse, Aggression, Coping, Verbal and Physical Aggression, Openness, Spiritual Practice

Alcohol abuse includes a range of unnatural alcohol drinking conducts, extending from frequent and high drinking to alcohol dependence, in severe cases it may result in health issues for individuals and other social, physical and psychological problems including alcohol-related crimes. Alcohol abuse has been a psychiatric diagnosis in the DSM-IV, and has been integrated with alcohol dependence into alcohol use disorder in the DSM-V; which previously had been two separate diagnostic classifications (American Psychiatric Association, 2013).

According to Diagnostic and Statistical Manual of Mental Disorders (APA, 2013), Alcohol use disorder is defined by a cluster of behavioral and physical symptoms, which can include withdrawal, tolerance, and craving. Prevalence of the habit in Indian population is varied in different regions. The rate of lifetime abstainers has been 89.6% in India. According to world health survey, there was 0 to 16% global prevalence among adults, 49% in case of

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women (Argentina), 8.6% in women (China); and 86.4% in United States of America as per national survey on drug use and health (WHO, 2018).

The major causes behind alcohol abuse include physiological triggers like impulsiveness, low self-esteem, and need for approval prompting inappropriate drinking; to medicate emotional issues/problems. There are social and environmental reasons, viz., peer pressure, easy access to liquor, poverty, depravity and lack of good education in micro-society with physical, psychological, or sexual abuse. Genetic factors have also been reported as cause behind alcoholism. Physiological symptoms and changes like feeling low, migraines, headaches, drowsiness and cramps may also push the individual to the use of alcohol to just avoid the discomfort. Adolescence derived from Latin ‘adolescere’ can be defined as a transitional stage with physical and psychological growth between a period of puberty to adulthood corresponding to the age of maturity (Stehlik, 2018). Adolescents tend to drink lesser in comparison to adults, but they have greater single time consumption (Deas et al.2000). Alcohol consumption during adolescence has been associated with significant differences in structure and functions of the developing human brain (Sarah et al.,2014).The study is mainly oriented on effects of alcohol consumption in relation to certain personality traits and attributes in young female college students.

METHODOLOGY

Sampling

100 young women participants in age group of 18-21 years were contacted from Undergraduate college-going population in Chandigarh region, India. Any cases of physical disability including visual/auditory were excluded. Alcohol dependence scale was used for the study. The work was based on questionnaire which was responded to by volunteers on their free consent. Hence, no ethical approval was required.

Assessment tools

As, it's a brief report/case study, only the specifics of the tools used are given here which include:

- **Alcohol Dependence scale:** It consists of 25 questions with already plausible answers provided (Skinner, 1982).
- **Buss Perry Aggression Questionnaire (BPAQ):** It consists of 29 already given statements with subscales depicting physical aggression, verbal aggression, anger, and hostile behavior (Buss and Perry, 1992)
- **Big Five Inventory:** It consists of 44 statements along with five factors including extraversion, agreeableness, conscientiousness, neuroticism, and openness (Goldberg, 1993)
- **Stress Coping Resource Inventory:** It comprises 32 questions with 4 probable answers with subscales like Wellness Scale, Thought Control Scale, Social Ease Scale, Tension Reduction Scale and Spiritual Practice Scale (Pargament et al., 2000).

RESULTS AND DISCUSSION

Correlation analysis of the total sample revealed a significant positive relationship between alcohol dependence and physical aggression with alcohol dependence and hostility ($r = 0.330, p \leq 0.01$) as depicted in Table 1. The similar study has been reported by Samantha et al. (2005) that alcohol consumption in public/private situations was significantly associated with chances of physical and verbal violence among women.

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A greater extent of alcohol related problems was observed in females who were sexually dependent in the past (Langeland et al., 2015). Students with drinking problems have been found to be creating a challenging situation to the campus interventions focused on reducing alcohol use (Barthelmes, 2010).

Students who are high in hostility and exhibiting risky drinking appear challenging population for on campus interventions aimed at reducing alcohol use (Barthelmes, 2010). The studied group was also found with increase in hostile behavior and anti-social traits with increase in drinking frequency and per capita/day consumption.

Correlation analysis of total sample revealed a significant positive relationship between alcohol dependence and extraversion ($r= 0.226, p \leq 0.05$), and significant negative relationship between alcohol and agreeableness ($r = -0.264, p \leq 0.05$). Extraversion has also been reported by authors to be positively related with alcoholic dependence (Fairbairn, 2015). Instances and studies with high agreeableness resulting in both decrease and increase in substance use have been reported (Hakulinen et al., 2015)

Alcohol dependence and spiritual practice were found to be negatively related by the target sample group ($r= -0.337, p \leq 0.05$) supported by the notion that spiritual involvement dependent on alcohol use is based on negative belief system and social influences (Thomas et al., 2009). Higher incidents of religious inclination related to lower alcohol use among adolescents have been observed (Vaughan et al., 2011).

Drinking has been described as a self-controllable condition lessened by higher level of education, punishment, maturity and willpower (Bechara, 2005). Alcohol dependence and thought control were found to be negatively related in the present study ($r= -0.275, p \leq 0.05$).

Table 1: Correlation among various parameters considered in relation to alcohol use in young women

	Aggression	Five Factors	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness	Stress	Wellness	Thought control	Active coping	Social ease	Tension reduction	Spiritual practice
Alcohol dependence	0.331**	-0.027	0.226	-0.264*	-0.201	0.15	0.159	-0.18	-0.199	-0.275*	-0.087	-0.051	-0.085	-0.337**
Hostility	0.330*	-0.029	0.15	-0.222	-0.235	0.115	0.232	-0.176	-0.21	-0.231	-0.097	-0.079	-0.046	0.013
Anger	0.198	0.106	0.22	-0.147	0.007	0.002	0.122	-0.081	-0.047	-0.205	-0.031	0.171	0.002	0.137
Verbal aggression	0.189	0.058	0.169	-0.182	-0.205	0.218	0.266*	-0.184	-0.222	-0.276*	-0.133	-0.141	-0.086	0.033
Physical aggression	0.363**	-0.009	0.228	-0.292*	-0.229	0.148	-0.03	-0.132	-0.115	-0.191	-0.061	-0.08	-0.078	-0.072
Aggression	1	-0.08	0.280*	-0.265*	-0.097	0.089	-0.232	-0.127	-0.136	-0.326*	-0.178	0.009	-0.084	0.044
Big five factor	-0.08	1	0.557**	0.492**	0.417**	0.424**	0.489**	0.067	-0.128	0.021	-0.101	0.029	-0.034	0.238
Extraversion	0.280*	0.557**	1	-0.035	-0.012	0.307*	0.096	0.026	-0.185	-0.032	-0.273*	0.003	-0.064	0.152
Agreeableness	-0.265*	0.492**	-0.035	1	0.321*	-0.087	0.289*	0.183	0.071	-0.058	0.202	0.151	0.041	0.205
Conscientiousness	-0.097	0.417**	-0.012	0.321*	1	-0.109	0.239	0.116	0.01	0.16	-0.03	0.055	-0.026	0.064
Neuroticism	0.089	0.424**	0.307*	-0.087	-0.109	1	0.092	-0.271*	-0.247	-0.094	-0.263*	-0.206	-0.178	-0.055
Openness	-0.232	0.489**	0.096	0.289*	0.239	0.092	1	0.091	-0.227	-0.075	-0.045	0.021	0.133	0.344**

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)

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Aggression was observed as slightly negatively correlated with positive personal traits like agreeableness and openness (Table 1).

Correlation analysis of total sample revealed significant negative relationship between aggression and coping (thought control scale) ($r = -0.326$, $p \leq 0.05$).

The study establishes a significant inter-relationship among various factors like aggression, self-control, positive personality, neuroticism and extraversion. It also suggested some other positive correlations like between openness and spiritual practice ($r = 0.344$, $p \leq 0.05$); and openness and agreeableness ($r = 0.289$, $p \leq 0.05$). There was significant negative relationship between neuroticism and coping ($r = -0.263$, $p \leq 0.05$). Agreeableness has been observed as positively correlated with problem engagement, support seeking, positive mindset, growth and overall acceptance (Afshar et al., 2015)

CONCLUSION

Correlation analysis of the data obtained revealed a significant correlation among alcohol dependence, personality, aggression and stress coping strategies and their sub domains among college students. Knowledge of personality characteristics and types of aggression prognosticators can enable designing and implementing interventions for alcohol abuse among adolescents/youth. The study has limitation in being a study only on females; therefore, it can also become a sample specific study.

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Conflict of Interest

The authors declared no conflict of interest.

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